

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Narayanan Sankarasubbier et al  
Serial No. : 10/032,890  
Filed : December 26,2001  
For : A process for preparing alkylated dihydroxybenzene  
Group Art Unit : 1621  
Examiner : Michael L. Shippen  
Office Action : January 30, 2004



Commissioner of Patents  
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**Declaration Under 37 C.F.R. § 1.131**

I, Sankarasubbier Narayanan, Ph.D, declare that

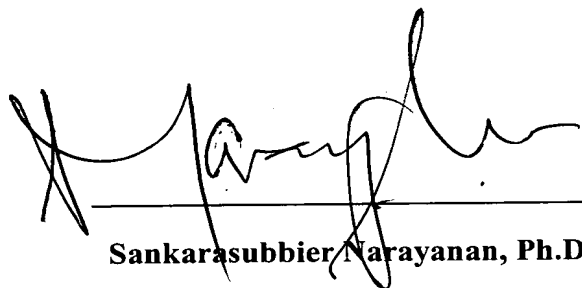
1. I am co-inventor of the subject matter disclosed and described in the above-identified patent application and a co-inventor of the subject matter of claims 1-5 therein.
2. Prior to 30<sup>th</sup> May 2001 (publication date of article S Narayanan et al., Applied Catalysis A: General, 2001, 213:273-278) I have conceived of using clays, including commercially available modified and unmodified montmorillonite K-10 as solid acid catalysts in the process for the alkylation of dihydroxybenzenes.
- 2a. Our patent application, US Serial No. 10/032,890 ("the 890 application") filed on December 26,2001, describes and claims a process of using modified montmorillonite K-10 as the solid acid catalyst as evidenced on page 3, line 16 through to page 7, line 9 of the '890 application, attached hereto as Exhibit 1.

2b. In particular, Table 1 on page 4 of the '890 application showed that modified montmorillonite K-10 provided much improved results in the yield of the dihydroxybenzene.

3. Our publication, entitled "Montmorillonite as a versatile solid acid catalyst for tert-butylation of resorcinol", published on 30<sup>th</sup> May 2001 in Applied Catalysis A General vol. 213, pp. 273-278, attached hereto, also discloses the process using modified montmorillonite K-10 for the alkylation of dihydroxybenzene as described in the '890 patent application. The publication date of 30<sup>th</sup> May 2001 is stamped on the journal. The receipt date of August 31, 2000, and the acceptance dated of December 15, 2000, are printed on the face of the Applied Catalysis A: General paper. The authors of this paper are both named as co-inventors on the '890 application.

4. I understand that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent or any patent issuing therefrom.

Dated: 10/03/05

  
Sankarasubbier Narayanan, Ph.D